# Human papillomavirus (HPV) Vaccine

This sheet is about exposure to the HPV vaccine during pregnancy and while breastfeeding. This information is based on published research studies. It should not take the place of medical care and advice from your healthcare provider.

## What is HPV?

Human papillomavirus (HPV) is the most common infection that is passed by skin-to-skin sexual contact. There are over 200 different kinds of HPV. At least 50% of all sexually active people have been exposed to at least one type of HPV. Most people will have no symptoms of HPV infection and no related health problems. However, some types of HPV do cause health problems, like genital warts. Others can cause cancer of the cervix and vagina, the penis, the mouth/throat, and the anus.

## What is the HPV vaccine?

The HPV vaccine protects against infection with some types of HPV that cause cancer and genital warts. Gardasil®9, which protects against 9 of the HPV virus types, is the brand name of the HPV vaccine currently available in the United States. The vaccine is approved for people between 9 and 45 years of age but it provides the most protection when given before becoming sexually active. The vaccine is given in either two or three doses (series). Gardasil®9 does not contain a live virus. This means it is noninfectious and cannot give a person HPV. Noninfectious vaccines in general are considered a low concern for pregnancy. MotherToBaby has a general fact sheet on vaccines here: https://mothertobaby.org/fact-sheets/vaccines-pregnancy/.

## I got the HPV vaccine. Can it make it harder for me to get pregnant?

There is no evidence to suggest that getting the HPV vaccine would make it harder to get pregnant in the future. Since the HPV vaccine is noninfectious, there is no recommended waiting period before trying to get pregnant. Pregnancy testing is not needed to get the HPV vaccine. However, the Centers for Disease Control and Prevention (CDC) recommends that if you find out that you are pregnant before you get all the doses, wait until after pregnancy to finish the vaccine series.

## Does getting the HPV vaccine increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Information from several studies (including one study looking at over 5000 pregnancies exposed to the HPV vaccine during pregnancy) does not suggest an increased chance of miscarriage.

One study suggested a possible increased chance of miscarriage when receiving the HPV vaccine in the first trimester of pregnancy. However, it is not known if these findings are due to the HPV vaccine or other factors.

## Does getting the HPV vaccine increase the chance of birth defects?

Birth defects can happen in any pregnancy for different reasons. Out of all babies born each year, about 3 out of 100 (3%) will have a birth defect. We look at research studies to try to understand if an exposure, like the HPV vaccine, might increase the chance of birth defects in a pregnancy. In over 4,000 pregnancies in which an HPV vaccine was given shortly before or during pregnancy, no increased chance of birth defects was found.

## Does getting the HPV vaccine increase the chance of other pregnancy-related problems?

Getting the HPV vaccine has not been shown to increase the chance of other pregnancy-related problems, such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth).

## Does getting the HPV vaccine affect future behavior or learning for the child?

Studies have not been done to see if the HPV vaccine can increase the chance of behavior or learning issues for the child. Based on what is known about noninfectious vaccines, getting the HPV vaccine is not expected to increase the chance of behavior or learning issues for the child.

### *Breastfeeding and the HPV vaccine:*

The CDC notes that the HPV vaccine can be given to a person who is breastfeeding. Be sure to talk to your healthcare provider about all your breastfeeding questions.

### *If a man gets the HPV vaccine, could it affect his fertility or increase the chance of birth defects?*

There is no evidence to suggest that the HPV vaccine could affect men's fertility (ability to get a partner pregnant) or increase the chance of birth defects. HPV infection in men can reduce fertility and HPV vaccination can protect against this. HPV can be spread by sexual intercourse to a partner who is pregnant. People who are pregnant and have partners with HPV should talk with their healthcare provider. For more general information on paternal exposures, please see the MotherToBaby fact sheet at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

**Please click here to view references.**



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